Special Health Information

Some people may be more vulnerable to certain contaminants in drinking water than the general population. Immuno-compromised persons such as persons with cancer undergoing chemotherapy, persons who have undergone organ transplants, people with HIV/AIDS or other immune system disorders, some elderly, and infants can be at risk from infections. These people should seek advice about drinking water from their health care providers. EPA and CDC (Centers for Disease Control and Prevention) guidelines on appropriate means to lessen the risk of infection by Cryptosporidium and other microbial contaminants are available from the Safe Drinking Water Hotline at 1-800-426-4791.

Lead in Drinking Water

"If present, elevated levels of lead can cause serious health problems, especially for pregnant women and young children. Lead in drinking water is primarily from materials and components associated with service lines and home plumbing. [NAME OF UTILITY] is responsible for providing high quality drinking water, but cannot control the variety of materials used in plumbing components. When your water has been sitting for several hours, you can minimize the potential for lead exposure by flushing your tap for 30 seconds to 2 minutes before using water for drinking or cooking. If you are concerned about lead in your water, you may wish to have your water tested. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available from the Safe Drinking Water Hotline or at http://www.epa.gov/safewater/lead."

How to Contact Us

For more information about this report, please call the Madison Utility Manager, Randy Eggenspiller, at (812) 265-8326.
You can also e-mail your questions to utilitymanager@madison-in.gov.

Customers may also attend Madison's Board of Public Works and Safety meetings. These public meetings are held at Madison City Hall (101 W Main Street) on the first and third Monday of every month at 11:30 a.m.

Water Information Sources

Madison Water Department:
www.madison-in.gov/water_dept.htm.
Indiana Department of Environmental Management:
www.in.gov/idem
United States Environmental Protection Agency:
www.epa.gov/safewater
Centers for Disease Control and Protection:
www.cdc.gov
American Water Works Association:
www.awwa.org
Water Quality Association:
www.wqa.org
Safe Drinking Water Hotline:
1-800-426-4791

CITY OF MADISON WATER DEPARTMENT
101 West Main Street • Madison, IN 47250-3776

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CITY OF MADISON
WATER DEPARTMENT
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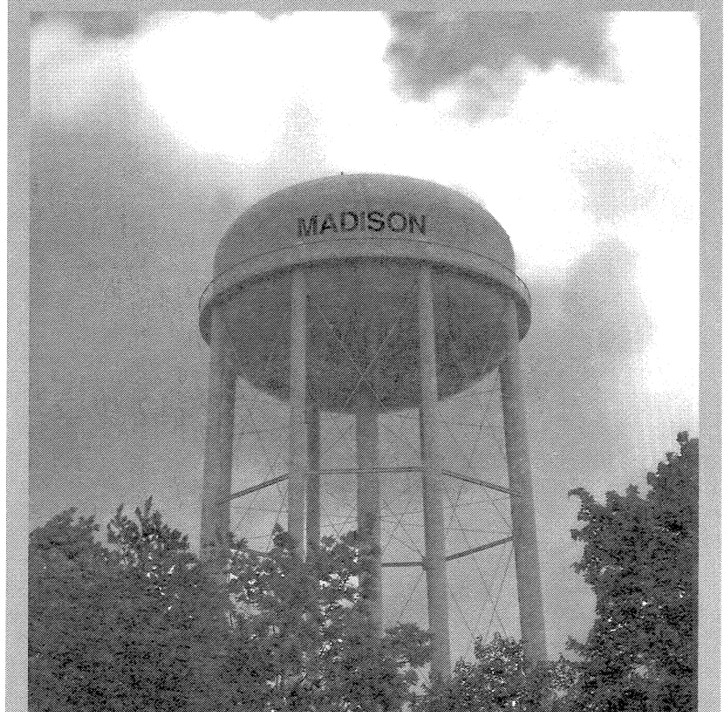
2008 Water Quality Report

2008 Water Quality Report



CITY OF MADISON
WATER DEPARTMENT
101 West Main Street
Madison, IN 47250-3776

City of Madison - PWS ID: IN5239006
Annual Water Quality Report

The Madison Water Department is proud to present its Annual Water Quality Report for 2008. The purpose of this report is to raise your understanding of drinking water and increase the public's awareness of the need to protect drinking water resources. This report includes a description of Madison's water system, our treatment methods, and the results of water quality testing that was performed from January 1 through December 31, 2008.

The Madison Water Department is proud of its record of providing high quality water to its customers. In order to ensure that our water is safe to drink, we conduct regular sampling for different contaminants. The United States Environmental Protection Agency (EPA) and Indiana Department of Environmental Management (IDEM) have established limits for these contaminants. During the 2008 calendar year, as in previous years, there were no violations of any of these standards in the Madison water system.

Drinking Water Source, Treatment Methods, and Distribution System

The Madison Water Department obtains all of its water from seven wells. Over 1 billion gallons of water was pumped from these wells in 2008. In accordance with Indiana State law, the Madison Water Department has prepared a Wellhead Protection Program to ensure the safety of these wells. A source water assessment was performed by IDEM in 2006, and their work indicated that Madison's wellfields have a high susceptibility to potential sources of contamination. This rating reflects local geology, the number of potential contaminant sources located within the wellhead protection area (such as abandoned gas stations), and the types of contaminants associated with those potential sources. Copies of this assessment are available by contacting Madison's Utility Billing office at (812) 265-8312.

The raw water from the wells is treated with polyphosphate for iron and manganese removal, chlorine for disinfection, and fluoride to prevent tooth decay. The treated water is distributed through approximately 120 miles of water main pipes for delivery to over 5,600 customers. This distribution system also includes six storage tanks that have a total capacity of 3.9 million gallons. Because the Madison Water Department sells water to a number of rural water systems that surround the City, we estimate that our wells provide water to a total population of over 20,000 people.

Potential Sources of Drinking Water Contamination

While groundwater wells such as Madison's are a generally safer and more reliable source of drinking water than surface water sources such as rivers and lakes, all types of source water can be exposed to different contaminants. As water travels over the surface of the land or through the ground, it dissolves naturally-occurring minerals and, in some cases, radioactive material. It may also pick up substances resulting from the presence of animals or from human activity.

Contaminants that may be present in source water include:

- Microbial Contaminants, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife.
- Inorganic Contaminants, such as salts and metals, which can be naturally occurring or result from urban storm runoff, industrial or domestic wastewater discharges, oil and gas production, mining, or farming.
- Pesticides and Herbicides, which may come from a variety of sources such as agriculture, urban storm water runoff, and residential uses.
- Organic Chemical Contaminants, including synthetic and volatile organic chemicals, which are by-products of industrial processes and petroleum production, and also can come from gas stations, urban storm water runoff, and septic systems.
- Radioactive Contaminants, which can be naturally occurring or be the result of oil and gas production and mining activities.

In order to ensure that tap water is safe to drink, IDEM and the EPA prescribe regulations that limit the amount of certain contaminants in water provided by public water systems. Federal Drug Administration (FDA) regulations establish limits for contaminants in bottled water that must provide the same protection for public health.

All drinking water sources, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. The presence of these contaminants does not necessarily indicate that the water poses a health risk. More information about such contaminants and their potential health effects can be obtained by calling the EPA's Safe Drinking Water Hotline at 1-800-426-4791.

Terms and Definitions

- AL (Action Level) - The concentration of a contaminant which, if exceeded, triggers a treatment or other requirement which a water system must follow.
- MCL (Maximum Contaminant Level) - The highest level of a contaminant that is allowed in drinking water. MCLs are set as close to the MCLGs as feasible using the best available treatment technology.
- MCLG (Maximum Contaminant Level Goal) - The level of a contaminant in drinking water below which there is no known or expected risk to health. MCLGs allow for a margin of safety.
- MRDL (Maximum Residual Disinfectant Level) – The highest level of a disinfectant allowed in drinking water. There is convincing evidence that the addition of a disinfectant is necessary for the control of microbial contaminants.
- MRDLG (Maximum Residual Disinfectant Level Goal) – The level of a drinking water disinfectant below which there is no known or expected risk to health. MRDLG does not reflect the benefits of the use of disinfectants to control microbial contaminants.
- N/A – Not applicable.
- ND – Not detected.
- ppm (parts per million) – one part substance per million parts water, or milligrams / liter
- ppb (parts per billion) – one part substance per billion parts water, or micrograms / liter
- ppt (parts per trillion) - one part substance per trillion parts water, or nanograms / liter
- ppq (parts per quadrillion) - one part substance per quadrillion parts water, or picograms / liter

TEST RESULTS

Contaminant (units)	MCLG	MCL	Amount Detected	Range of Detection	Compliance Achieved	Typical Source
Inorganic Contaminants (sampled in 2008)						
Antimony (ppb)	6	6	0.6	0.5-0.7	Yes	Discharge from petroleum refineries, fire retardants, ceramics, electronics, solder.
Barium (ppm)	2	2	0.07	0.051-0.089	Yes	Discharge from drilling wastes and metal refineries, erosion of natural deposits.
Cadmium (ppb)	5	5	0.05	ND - 0.1	Yes	Corrosion of galvanized pipes, erosion of natrual deposits, discharge from metal refineries, runoff from waste barreries and paints.
Chromium (ppb)	100	100	2.6	2.4 - 2.8	Yes	Discharge from steel and pulp mills, erosion of natural deposits.
Mercury (ppb)	2	2	0.05	ND - 0.1	Yes	Erosion of natural deposits, discharge from refineries and factories, runoff from landfills, runoff from cropland.
Nickel (ppm)	0.1	N/A	0.005	0.005	Yes	Erosion of natural deposits, discharge from electroplating, stainless steel, and alloy products, mining and refining operations.
Sodium (ppm)	N/A	N/A	29.2	25.6-32.8	N/A	Naturally occurring.
Volatile Organic Contaminants (sampled in 2008)						
1,1,1-Trichloroethane (ppb)	200	200	0.35	ND - 0.7	Yes	Discharge from metal degreasing sites and other factories.
Trichloroethylene (ppb)	0	5	0.5	ND - 1.0	Yes	Discharge from metal degreasing sites and other factories.
Other Contaminants (sampled in 2008)						
Lead (ppb, 90th percentile)	0	15 (AL)	2.1	N/A	Yes	Corrosion of household plumbing, erosion of natural deposits.
Copper (ppm, 90th percentile)	1.3	1.3 (AL)	0.35	N/A	Yes	Corrosion of household plumbing, erosion of natural deposits, leaching from wood preservatives.
Other Contaminants (sampled in 2007)						
Nitrate (ppm)	10	10	0.5	0.18-0.22	Yes	Runoff from fertilizer use, leaching from septic tanks, sewage, erosion of natural deposits.
Total Trihalomethanes, TTHM (ppb)	N/A	80	6.49	1.2 - 10.1	Yes	By-product of drinking water chlorination.
Haloacetic Acids, HAA5 (ppb)	N/A	60	0.49	ND - 1.4	Yes	By-product of drinking water chlorination.
Total Coliform Bacteria (# of positive samples)	0	1 positive sample per month	1 positive sample in 2007	N/A	Yes	Naturally present in the environment.
Flouride (ppm)	4	4	1.06	0.46 - 1.40	Yes	Water additive that promotes strong teeth, erosion of natural deposits, discharge from fertilizer and aluminum factories.
Chlorine (ppm)	4 (MRDLG)	4 (MRDL)	0.36	0.03 - 0.93	Yes	Water additive used to control microbes.